



Solve each problem. Answer as a decimal (if necessary).

Answers

1)  $3 \times 10^6$  is \_\_\_\_\_  $\times$  the value of  $9 \times 10^8$

1. \_\_\_\_\_

2)  $3 \times 10^3$  is \_\_\_\_\_  $\times$  the value of  $7 \times 10^5$

2. \_\_\_\_\_

3)  $7 \times 10^3$  is \_\_\_\_\_  $\times$  the value of  $3 \times 10^6$

3. \_\_\_\_\_

4)  $7 \times 10^2$  is \_\_\_\_\_  $\times$  the value of  $2 \times 10^5$

4. \_\_\_\_\_

5)  $8 \times 10^9$  is \_\_\_\_\_  $\times$  the value of  $3 \times 10^6$

5. \_\_\_\_\_

6)  $4 \times 10^8$  is \_\_\_\_\_  $\times$  the value of  $7 \times 10^2$

6. \_\_\_\_\_

7)  $8 \times 10^5$  is \_\_\_\_\_  $\times$  the value of  $4 \times 10^3$

7. \_\_\_\_\_

8)  $7 \times 10^8$  is \_\_\_\_\_  $\times$  the value of  $4 \times 10^5$

8. \_\_\_\_\_

9)  $5 \times 10^3$  is \_\_\_\_\_  $\times$  the value of  $4 \times 10^2$

9. \_\_\_\_\_



Solve each problem. Answer as a decimal (if necessary).

1)  $3 \times 10^6$  is \_\_\_\_\_  $\times$  the value of  $9 \times 10^8$

$$\frac{3 \times 10^6}{9 \times 10^8} = \frac{3}{9} \times \frac{10^6}{10^8} = \frac{1}{3} \times 10^{-2} = 0.333 \times 10^{-2}$$

2)  $3 \times 10^3$  is \_\_\_\_\_  $\times$  the value of  $7 \times 10^5$

$$\frac{3 \times 10^3}{7 \times 10^5} = \frac{3}{7} \times \frac{10^3}{10^5} = \frac{3}{7} \times 10^{-2} = 0.429 \times 10^{-2}$$

3)  $7 \times 10^3$  is \_\_\_\_\_  $\times$  the value of  $3 \times 10^6$

$$\frac{7 \times 10^3}{3 \times 10^6} = \frac{7}{3} \times \frac{10^3}{10^6} = \frac{7}{3} \times 10^{-3} = 2.333 \times 10^{-3}$$

4)  $7 \times 10^2$  is \_\_\_\_\_  $\times$  the value of  $2 \times 10^5$

$$\frac{7 \times 10^2}{2 \times 10^5} = \frac{7}{2} \times \frac{10^2}{10^5} = \frac{7}{2} \times 10^{-3} = 3.5 \times 10^{-3}$$

5)  $8 \times 10^9$  is \_\_\_\_\_  $\times$  the value of  $3 \times 10^6$

$$\frac{8 \times 10^9}{3 \times 10^6} = \frac{8}{3} \times \frac{10^9}{10^6} = \frac{8}{3} \times 10^3 = 2.667 \times 10^3$$

6)  $4 \times 10^8$  is \_\_\_\_\_  $\times$  the value of  $7 \times 10^2$

$$\frac{4 \times 10^8}{7 \times 10^2} = \frac{4}{7} \times \frac{10^8}{10^2} = \frac{4}{7} \times 10^6 = 0.571 \times 10^6$$

7)  $8 \times 10^5$  is \_\_\_\_\_  $\times$  the value of  $4 \times 10^3$

$$\frac{8 \times 10^5}{4 \times 10^3} = \frac{8}{4} \times \frac{10^5}{10^3} = \frac{2}{1} \times 10^2 = 2 \times 10^2$$

8)  $7 \times 10^8$  is \_\_\_\_\_  $\times$  the value of  $4 \times 10^5$

$$\frac{7 \times 10^8}{4 \times 10^5} = \frac{7}{4} \times \frac{10^8}{10^5} = \frac{7}{4} \times 10^3 = 1.75 \times 10^3$$

9)  $5 \times 10^3$  is \_\_\_\_\_  $\times$  the value of  $4 \times 10^2$

$$\frac{5 \times 10^3}{4 \times 10^2} = \frac{5}{4} \times \frac{10^3}{10^2} = \frac{5}{4} \times 10^1 = 1.25 \times 10^1$$

**Answers**

1. **0.00333**

2. **0.00429**

3. **0.002333**

4. **0.0035**

5. **2,667**

6. **571,000**

7. **200**

8. **1,750**

9. **12.5**



Solve each problem. Answer as a decimal (if necessary).

Answers

1)  $7 \times 10^8$  is \_\_\_\_\_  $\times$  the value of  $3 \times 10^9$

1. \_\_\_\_\_

2)  $3 \times 10^3$  is \_\_\_\_\_  $\times$  the value of  $6 \times 10^8$

2. \_\_\_\_\_

3)  $6 \times 10^2$  is \_\_\_\_\_  $\times$  the value of  $2 \times 10^3$

3. \_\_\_\_\_

4)  $8 \times 10^8$  is \_\_\_\_\_  $\times$  the value of  $3 \times 10^2$

4. \_\_\_\_\_

5)  $8 \times 10^7$  is \_\_\_\_\_  $\times$  the value of  $2 \times 10^5$

5. \_\_\_\_\_

6)  $4 \times 10^8$  is \_\_\_\_\_  $\times$  the value of  $3 \times 10^5$

6. \_\_\_\_\_

7)  $7 \times 10^8$  is \_\_\_\_\_  $\times$  the value of  $9 \times 10^3$

7. \_\_\_\_\_

8)  $3 \times 10^8$  is \_\_\_\_\_  $\times$  the value of  $9 \times 10^4$

8. \_\_\_\_\_

9)  $2 \times 10^5$  is \_\_\_\_\_  $\times$  the value of  $8 \times 10^4$

9. \_\_\_\_\_



Solve each problem. Answer as a decimal (if necessary).

1)  $7 \times 10^8$  is \_\_\_\_\_  $\times$  the value of  $3 \times 10^9$   

$$\frac{7 \times 10^8}{3 \times 10^9} = \frac{7}{3} \times \frac{10^8}{10^9} = \frac{7}{3} \times 10^{-1} = 2.333 \times 10^{-1}$$

2)  $3 \times 10^3$  is \_\_\_\_\_  $\times$  the value of  $6 \times 10^8$   

$$\frac{3 \times 10^3}{6 \times 10^8} = \frac{3}{6} \times \frac{10^3}{10^8} = \frac{1}{2} \times 10^{-5} = 0.5 \times 10^{-5}$$

3)  $6 \times 10^2$  is \_\_\_\_\_  $\times$  the value of  $2 \times 10^3$   

$$\frac{6 \times 10^2}{2 \times 10^3} = \frac{6}{2} \times \frac{10^2}{10^3} = \frac{3}{1} \times 10^{-1} = 3 \times 10^{-1}$$

4)  $8 \times 10^8$  is \_\_\_\_\_  $\times$  the value of  $3 \times 10^2$   

$$\frac{8 \times 10^8}{3 \times 10^2} = \frac{8}{3} \times \frac{10^8}{10^2} = \frac{8}{3} \times 10^6 = 2.667 \times 10^6$$

5)  $8 \times 10^7$  is \_\_\_\_\_  $\times$  the value of  $2 \times 10^5$   

$$\frac{8 \times 10^7}{2 \times 10^5} = \frac{8}{2} \times \frac{10^7}{10^5} = \frac{4}{1} \times 10^2 = 4 \times 10^2$$

6)  $4 \times 10^8$  is \_\_\_\_\_  $\times$  the value of  $3 \times 10^5$   

$$\frac{4 \times 10^8}{3 \times 10^5} = \frac{4}{3} \times \frac{10^8}{10^5} = \frac{4}{3} \times 10^3 = 1.333 \times 10^3$$

7)  $7 \times 10^8$  is \_\_\_\_\_  $\times$  the value of  $9 \times 10^3$   

$$\frac{7 \times 10^8}{9 \times 10^3} = \frac{7}{9} \times \frac{10^8}{10^3} = \frac{7}{9} \times 10^5 = 0.778 \times 10^5$$

8)  $3 \times 10^8$  is \_\_\_\_\_  $\times$  the value of  $9 \times 10^4$   

$$\frac{3 \times 10^8}{9 \times 10^4} = \frac{3}{9} \times \frac{10^8}{10^4} = \frac{1}{3} \times 10^4 = 0.333 \times 10^4$$

9)  $2 \times 10^5$  is \_\_\_\_\_  $\times$  the value of  $8 \times 10^4$   

$$\frac{2 \times 10^5}{8 \times 10^4} = \frac{2}{8} \times \frac{10^5}{10^4} = \frac{1}{4} \times 10^1 = 0.25 \times 10^1$$

**Answers**

1. **0.2333**

2. **0.000005**

3. **0.3**

4. **2,667,000**

5. **400**

6. **1,333**

7. **77,800**

8. **3,330**

9. **2.5**



Solve each problem. Answer as a decimal (if necessary).

Answers

1)  $3 \times 10^4$  is \_\_\_\_\_  $\times$  the value of  $2 \times 10^8$

1. \_\_\_\_\_

2)  $4 \times 10^9$  is \_\_\_\_\_  $\times$  the value of  $6 \times 10^3$

2. \_\_\_\_\_

3)  $2 \times 10^2$  is \_\_\_\_\_  $\times$  the value of  $3 \times 10^6$

3. \_\_\_\_\_

4)  $4 \times 10^2$  is \_\_\_\_\_  $\times$  the value of  $5 \times 10^8$

4. \_\_\_\_\_

5)  $9 \times 10^4$  is \_\_\_\_\_  $\times$  the value of  $2 \times 10^7$

5. \_\_\_\_\_

6)  $6 \times 10^6$  is \_\_\_\_\_  $\times$  the value of  $2 \times 10^7$

6. \_\_\_\_\_

7)  $3 \times 10^4$  is \_\_\_\_\_  $\times$  the value of  $4 \times 10^9$

7. \_\_\_\_\_

8)  $6 \times 10^8$  is \_\_\_\_\_  $\times$  the value of  $9 \times 10^9$

8. \_\_\_\_\_

9)  $4 \times 10^6$  is \_\_\_\_\_  $\times$  the value of  $7 \times 10^9$

9. \_\_\_\_\_



Solve each problem. Answer as a decimal (if necessary).

1)  $3 \times 10^4$  is \_\_\_\_\_  $\times$  the value of  $2 \times 10^8$

$$\frac{3 \times 10^4}{2 \times 10^8} = \frac{3}{2} \times \frac{10^4}{10^8} = \frac{3}{2} \times 10^{-4} = 1.5 \times 10^{-4}$$

2)  $4 \times 10^9$  is \_\_\_\_\_  $\times$  the value of  $6 \times 10^3$

$$\frac{4 \times 10^9}{6 \times 10^3} = \frac{4}{6} \times \frac{10^9}{10^3} = \frac{2}{3} \times 10^6 = 0.667 \times 10^6$$

3)  $2 \times 10^2$  is \_\_\_\_\_  $\times$  the value of  $3 \times 10^6$

$$\frac{2 \times 10^2}{3 \times 10^6} = \frac{2}{3} \times \frac{10^2}{10^6} = \frac{2}{3} \times 10^{-4} = 0.667 \times 10^{-4}$$

4)  $4 \times 10^2$  is \_\_\_\_\_  $\times$  the value of  $5 \times 10^8$

$$\frac{4 \times 10^2}{5 \times 10^8} = \frac{4}{5} \times \frac{10^2}{10^8} = \frac{4}{5} \times 10^{-6} = 0.8 \times 10^{-6}$$

5)  $9 \times 10^4$  is \_\_\_\_\_  $\times$  the value of  $2 \times 10^7$

$$\frac{9 \times 10^4}{2 \times 10^7} = \frac{9}{2} \times \frac{10^4}{10^7} = \frac{9}{2} \times 10^{-3} = 4.5 \times 10^{-3}$$

6)  $6 \times 10^6$  is \_\_\_\_\_  $\times$  the value of  $2 \times 10^7$

$$\frac{6 \times 10^6}{2 \times 10^7} = \frac{6}{2} \times \frac{10^6}{10^7} = \frac{3}{1} \times 10^{-1} = 3 \times 10^{-1}$$

7)  $3 \times 10^4$  is \_\_\_\_\_  $\times$  the value of  $4 \times 10^9$

$$\frac{3 \times 10^4}{4 \times 10^9} = \frac{3}{4} \times \frac{10^4}{10^9} = \frac{3}{4} \times 10^{-5} = 0.75 \times 10^{-5}$$

8)  $6 \times 10^8$  is \_\_\_\_\_  $\times$  the value of  $9 \times 10^9$

$$\frac{6 \times 10^8}{9 \times 10^9} = \frac{6}{9} \times \frac{10^8}{10^9} = \frac{2}{3} \times 10^{-1} = 0.667 \times 10^{-1}$$

9)  $4 \times 10^6$  is \_\_\_\_\_  $\times$  the value of  $7 \times 10^9$

$$\frac{4 \times 10^6}{7 \times 10^9} = \frac{4}{7} \times \frac{10^6}{10^9} = \frac{4}{7} \times 10^{-3} = 0.571 \times 10^{-3}$$

**Answers**

1. **0.00015**

2. **667,000**

3. **0.0000667**

4. **0.0000008**

5. **0.0045**

6. **0.3**

7. **0.0000075**

8. **0.0667**

9. **0.000571**



Solve each problem. Answer as a decimal (if necessary).

Answers

1)  $3 \times 10^8$  is \_\_\_\_\_  $\times$  the value of  $5 \times 10^9$

1. \_\_\_\_\_

2)  $6 \times 10^8$  is \_\_\_\_\_  $\times$  the value of  $7 \times 10^2$

2. \_\_\_\_\_

3)  $8 \times 10^4$  is \_\_\_\_\_  $\times$  the value of  $6 \times 10^6$

3. \_\_\_\_\_

4)  $4 \times 10^9$  is \_\_\_\_\_  $\times$  the value of  $8 \times 10^8$

4. \_\_\_\_\_

5)  $8 \times 10^8$  is \_\_\_\_\_  $\times$  the value of  $6 \times 10^4$

5. \_\_\_\_\_

6)  $2 \times 10^3$  is \_\_\_\_\_  $\times$  the value of  $4 \times 10^2$

6. \_\_\_\_\_

7)  $2 \times 10^7$  is \_\_\_\_\_  $\times$  the value of  $3 \times 10^3$

7. \_\_\_\_\_

8)  $9 \times 10^4$  is \_\_\_\_\_  $\times$  the value of  $4 \times 10^9$

8. \_\_\_\_\_

9)  $9 \times 10^4$  is \_\_\_\_\_  $\times$  the value of  $3 \times 10^2$

9. \_\_\_\_\_



Solve each problem. Answer as a decimal (if necessary).

1)  $3 \times 10^8$  is \_\_\_\_\_  $\times$  the value of  $5 \times 10^9$

$$\frac{3 \times 10^8}{5 \times 10^9} = \frac{3}{5} \times \frac{10^8}{10^9} = \frac{3}{5} \times 10^{-1} = 0.6 \times 10^{-1}$$

2)  $6 \times 10^8$  is \_\_\_\_\_  $\times$  the value of  $7 \times 10^2$

$$\frac{6 \times 10^8}{7 \times 10^2} = \frac{6}{7} \times \frac{10^8}{10^2} = \frac{6}{7} \times 10^6 = 0.857 \times 10^6$$

3)  $8 \times 10^4$  is \_\_\_\_\_  $\times$  the value of  $6 \times 10^6$

$$\frac{8 \times 10^4}{6 \times 10^6} = \frac{8}{6} \times \frac{10^4}{10^6} = \frac{4}{3} \times 10^{-2} = 1.333 \times 10^{-2}$$

4)  $4 \times 10^9$  is \_\_\_\_\_  $\times$  the value of  $8 \times 10^8$

$$\frac{4 \times 10^9}{8 \times 10^8} = \frac{4}{8} \times \frac{10^9}{10^8} = \frac{1}{2} \times 10^1 = 0.5 \times 10^1$$

5)  $8 \times 10^8$  is \_\_\_\_\_  $\times$  the value of  $6 \times 10^4$

$$\frac{8 \times 10^8}{6 \times 10^4} = \frac{8}{6} \times \frac{10^8}{10^4} = \frac{4}{3} \times 10^4 = 1.333 \times 10^4$$

6)  $2 \times 10^3$  is \_\_\_\_\_  $\times$  the value of  $4 \times 10^2$

$$\frac{2 \times 10^3}{4 \times 10^2} = \frac{2}{4} \times \frac{10^3}{10^2} = \frac{1}{2} \times 10^1 = 0.5 \times 10^1$$

7)  $2 \times 10^7$  is \_\_\_\_\_  $\times$  the value of  $3 \times 10^3$

$$\frac{2 \times 10^7}{3 \times 10^3} = \frac{2}{3} \times \frac{10^7}{10^3} = \frac{2}{3} \times 10^4 = 0.667 \times 10^4$$

8)  $9 \times 10^4$  is \_\_\_\_\_  $\times$  the value of  $4 \times 10^9$

$$\frac{9 \times 10^4}{4 \times 10^9} = \frac{9}{4} \times \frac{10^4}{10^9} = \frac{9}{4} \times 10^{-5} = 2.25 \times 10^{-5}$$

9)  $9 \times 10^4$  is \_\_\_\_\_  $\times$  the value of  $3 \times 10^2$

$$\frac{9 \times 10^4}{3 \times 10^2} = \frac{9}{3} \times \frac{10^4}{10^2} = \frac{3}{1} \times 10^2 = 3 \times 10^2$$

Answers

1. 0.06

2. 857,000

3. 0.01333

4. 5

5. 13,330

6. 5

7. 6,670

8. 0.0000225

9. 300





Solve each problem. Answer as a decimal (if necessary).

1)  $5 \times 10^2$  is \_\_\_\_\_  $\times$  the value of  $2 \times 10^9$

2)  $7 \times 10^7$  is \_\_\_\_\_  $\times$  the value of  $3 \times 10^9$

3)  $6 \times 10^5$  is \_\_\_\_\_  $\times$  the value of  $7 \times 10^6$

4)  $3 \times 10^5$  is \_\_\_\_\_  $\times$  the value of  $4 \times 10^7$

5)  $2 \times 10^2$  is \_\_\_\_\_  $\times$  the value of  $6 \times 10^4$

6)  $5 \times 10^3$  is \_\_\_\_\_  $\times$  the value of  $4 \times 10^7$

7)  $9 \times 10^7$  is \_\_\_\_\_  $\times$  the value of  $8 \times 10^5$

8)  $9 \times 10^9$  is \_\_\_\_\_  $\times$  the value of  $7 \times 10^5$

9)  $2 \times 10^2$  is \_\_\_\_\_  $\times$  the value of  $9 \times 10^4$

**Answers**

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

5. \_\_\_\_\_

6. \_\_\_\_\_

7. \_\_\_\_\_

8. \_\_\_\_\_

9. \_\_\_\_\_



Solve each problem. Answer as a decimal (if necessary).

1)  $5 \times 10^2$  is \_\_\_\_\_  $\times$  the value of  $2 \times 10^9$

$$\frac{5 \times 10^2}{2 \times 10^9} = \frac{5}{2} \times \frac{10^2}{10^9} = \frac{5}{2} \times 10^{-7} = 2.5 \times 10^{-7}$$

2)  $7 \times 10^7$  is \_\_\_\_\_  $\times$  the value of  $3 \times 10^9$

$$\frac{7 \times 10^7}{3 \times 10^9} = \frac{7}{3} \times \frac{10^7}{10^9} = \frac{7}{3} \times 10^{-2} = 2.333 \times 10^{-2}$$

3)  $6 \times 10^5$  is \_\_\_\_\_  $\times$  the value of  $7 \times 10^6$

$$\frac{6 \times 10^5}{7 \times 10^6} = \frac{6}{7} \times \frac{10^5}{10^6} = \frac{6}{7} \times 10^{-1} = 0.857 \times 10^{-1}$$

4)  $3 \times 10^5$  is \_\_\_\_\_  $\times$  the value of  $4 \times 10^7$

$$\frac{3 \times 10^5}{4 \times 10^7} = \frac{3}{4} \times \frac{10^5}{10^7} = \frac{3}{4} \times 10^{-2} = 0.75 \times 10^{-2}$$

5)  $2 \times 10^2$  is \_\_\_\_\_  $\times$  the value of  $6 \times 10^4$

$$\frac{2 \times 10^2}{6 \times 10^4} = \frac{2}{6} \times \frac{10^2}{10^4} = \frac{1}{3} \times 10^{-2} = 0.333 \times 10^{-2}$$

6)  $5 \times 10^3$  is \_\_\_\_\_  $\times$  the value of  $4 \times 10^7$

$$\frac{5 \times 10^3}{4 \times 10^7} = \frac{5}{4} \times \frac{10^3}{10^7} = \frac{5}{4} \times 10^{-4} = 1.25 \times 10^{-4}$$

7)  $9 \times 10^7$  is \_\_\_\_\_  $\times$  the value of  $8 \times 10^5$

$$\frac{9 \times 10^7}{8 \times 10^5} = \frac{9}{8} \times \frac{10^7}{10^5} = \frac{9}{8} \times 10^2 = 1.125 \times 10^2$$

8)  $9 \times 10^9$  is \_\_\_\_\_  $\times$  the value of  $7 \times 10^5$

$$\frac{9 \times 10^9}{7 \times 10^5} = \frac{9}{7} \times \frac{10^9}{10^5} = \frac{9}{7} \times 10^4 = 1.286 \times 10^4$$

9)  $2 \times 10^2$  is \_\_\_\_\_  $\times$  the value of  $9 \times 10^4$

$$\frac{2 \times 10^2}{9 \times 10^4} = \frac{2}{9} \times \frac{10^2}{10^4} = \frac{2}{9} \times 10^{-2} = 0.222 \times 10^{-2}$$

Answers

1. **0.00000025**

2. **0.02333**

3. **0.0857**

4. **0.0075**

5. **0.00333**

6. **0.000125**

7. **112.5**

8. **12,860**

9. **0.00222**



Solve each problem. Answer as a decimal (if necessary).

1)  $2 \times 10^7$  is \_\_\_\_\_  $\times$  the value of  $8 \times 10^2$

2)  $9 \times 10^6$  is \_\_\_\_\_  $\times$  the value of  $6 \times 10^4$

3)  $3 \times 10^4$  is \_\_\_\_\_  $\times$  the value of  $8 \times 10^5$

4)  $7 \times 10^8$  is \_\_\_\_\_  $\times$  the value of  $9 \times 10^4$

5)  $2 \times 10^4$  is \_\_\_\_\_  $\times$  the value of  $3 \times 10^9$

6)  $8 \times 10^7$  is \_\_\_\_\_  $\times$  the value of  $9 \times 10^3$

7)  $9 \times 10^4$  is \_\_\_\_\_  $\times$  the value of  $3 \times 10^5$

8)  $4 \times 10^8$  is \_\_\_\_\_  $\times$  the value of  $5 \times 10^5$

9)  $7 \times 10^2$  is \_\_\_\_\_  $\times$  the value of  $9 \times 10^5$

**Answers**

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

5. \_\_\_\_\_

6. \_\_\_\_\_

7. \_\_\_\_\_

8. \_\_\_\_\_

9. \_\_\_\_\_



Solve each problem. Answer as a decimal (if necessary).

1)  $2 \times 10^7$  is \_\_\_\_\_  $\times$  the value of  $8 \times 10^2$

$$\frac{2 \times 10^7}{8 \times 10^2} = \frac{2}{8} \times \frac{10^7}{10^2} = \frac{1}{4} \times 10^5 = 0.25 \times 10^5$$

2)  $9 \times 10^6$  is \_\_\_\_\_  $\times$  the value of  $6 \times 10^4$

$$\frac{9 \times 10^6}{6 \times 10^4} = \frac{9}{6} \times \frac{10^6}{10^4} = \frac{3}{2} \times 10^2 = 1.5 \times 10^2$$

3)  $3 \times 10^4$  is \_\_\_\_\_  $\times$  the value of  $8 \times 10^5$

$$\frac{3 \times 10^4}{8 \times 10^5} = \frac{3}{8} \times \frac{10^4}{10^5} = \frac{3}{8} \times 10^{-1} = 0.375 \times 10^{-1}$$

4)  $7 \times 10^8$  is \_\_\_\_\_  $\times$  the value of  $9 \times 10^4$

$$\frac{7 \times 10^8}{9 \times 10^4} = \frac{7}{9} \times \frac{10^8}{10^4} = \frac{7}{9} \times 10^4 = 0.778 \times 10^4$$

5)  $2 \times 10^4$  is \_\_\_\_\_  $\times$  the value of  $3 \times 10^9$

$$\frac{2 \times 10^4}{3 \times 10^9} = \frac{2}{3} \times \frac{10^4}{10^9} = \frac{2}{3} \times 10^{-5} = 0.667 \times 10^{-5}$$

6)  $8 \times 10^7$  is \_\_\_\_\_  $\times$  the value of  $9 \times 10^3$

$$\frac{8 \times 10^7}{9 \times 10^3} = \frac{8}{9} \times \frac{10^7}{10^3} = \frac{8}{9} \times 10^4 = 0.889 \times 10^4$$

7)  $9 \times 10^4$  is \_\_\_\_\_  $\times$  the value of  $3 \times 10^5$

$$\frac{9 \times 10^4}{3 \times 10^5} = \frac{9}{3} \times \frac{10^4}{10^5} = \frac{3}{1} \times 10^{-1} = 3 \times 10^{-1}$$

8)  $4 \times 10^8$  is \_\_\_\_\_  $\times$  the value of  $5 \times 10^5$

$$\frac{4 \times 10^8}{5 \times 10^5} = \frac{4}{5} \times \frac{10^8}{10^5} = \frac{4}{5} \times 10^3 = 0.8 \times 10^3$$

9)  $7 \times 10^2$  is \_\_\_\_\_  $\times$  the value of  $9 \times 10^5$

$$\frac{7 \times 10^2}{9 \times 10^5} = \frac{7}{9} \times \frac{10^2}{10^5} = \frac{7}{9} \times 10^{-3} = 0.778 \times 10^{-3}$$

**Answers**

1. **25,000**

2. **150**

3. **0.0375**

4. **7,780**

5. **0.00000667**

6. **8,890**

7. **0.3**

8. **800**

9. **0.000778**



Solve each problem. Answer as a decimal (if necessary).

1)  $8 \times 10^3$  is \_\_\_\_\_  $\times$  the value of  $6 \times 10^5$

2)  $6 \times 10^3$  is \_\_\_\_\_  $\times$  the value of  $2 \times 10^6$

3)  $5 \times 10^8$  is \_\_\_\_\_  $\times$  the value of  $7 \times 10^5$

4)  $5 \times 10^9$  is \_\_\_\_\_  $\times$  the value of  $4 \times 10^2$

5)  $3 \times 10^2$  is \_\_\_\_\_  $\times$  the value of  $6 \times 10^9$

6)  $4 \times 10^9$  is \_\_\_\_\_  $\times$  the value of  $7 \times 10^6$

7)  $2 \times 10^6$  is \_\_\_\_\_  $\times$  the value of  $6 \times 10^2$

8)  $6 \times 10^6$  is \_\_\_\_\_  $\times$  the value of  $2 \times 10^7$

9)  $7 \times 10^6$  is \_\_\_\_\_  $\times$  the value of  $6 \times 10^5$

**Answers**

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

5. \_\_\_\_\_

6. \_\_\_\_\_

7. \_\_\_\_\_

8. \_\_\_\_\_

9. \_\_\_\_\_



Solve each problem. Answer as a decimal (if necessary).

1)  $8 \times 10^3$  is \_\_\_\_\_  $\times$  the value of  $6 \times 10^5$   

$$\frac{8 \times 10^3}{6 \times 10^5} = \frac{8}{6} \times \frac{10^3}{10^5} = \frac{4}{3} \times 10^{-2} = 1.333 \times 10^{-2}$$

2)  $6 \times 10^3$  is \_\_\_\_\_  $\times$  the value of  $2 \times 10^6$   

$$\frac{6 \times 10^3}{2 \times 10^6} = \frac{6}{2} \times \frac{10^3}{10^6} = \frac{3}{1} \times 10^{-3} = 3 \times 10^{-3}$$

3)  $5 \times 10^8$  is \_\_\_\_\_  $\times$  the value of  $7 \times 10^5$   

$$\frac{5 \times 10^8}{7 \times 10^5} = \frac{5}{7} \times \frac{10^8}{10^5} = \frac{5}{7} \times 10^3 = 0.714 \times 10^3$$

4)  $5 \times 10^9$  is \_\_\_\_\_  $\times$  the value of  $4 \times 10^2$   

$$\frac{5 \times 10^9}{4 \times 10^2} = \frac{5}{4} \times \frac{10^9}{10^2} = \frac{5}{4} \times 10^7 = 1.25 \times 10^7$$

5)  $3 \times 10^2$  is \_\_\_\_\_  $\times$  the value of  $6 \times 10^9$   

$$\frac{3 \times 10^2}{6 \times 10^9} = \frac{3}{6} \times \frac{10^2}{10^9} = \frac{1}{2} \times 10^{-7} = 0.5 \times 10^{-7}$$

6)  $4 \times 10^9$  is \_\_\_\_\_  $\times$  the value of  $7 \times 10^6$   

$$\frac{4 \times 10^9}{7 \times 10^6} = \frac{4}{7} \times \frac{10^9}{10^6} = \frac{4}{7} \times 10^3 = 0.571 \times 10^3$$

7)  $2 \times 10^6$  is \_\_\_\_\_  $\times$  the value of  $6 \times 10^2$   

$$\frac{2 \times 10^6}{6 \times 10^2} = \frac{2}{6} \times \frac{10^6}{10^2} = \frac{1}{3} \times 10^4 = 0.333 \times 10^4$$

8)  $6 \times 10^6$  is \_\_\_\_\_  $\times$  the value of  $2 \times 10^7$   

$$\frac{6 \times 10^6}{2 \times 10^7} = \frac{6}{2} \times \frac{10^6}{10^7} = \frac{3}{1} \times 10^{-1} = 3 \times 10^{-1}$$

9)  $7 \times 10^6$  is \_\_\_\_\_  $\times$  the value of  $6 \times 10^5$   

$$\frac{7 \times 10^6}{6 \times 10^5} = \frac{7}{6} \times \frac{10^6}{10^5} = \frac{7}{6} \times 10^1 = 1.167 \times 10^1$$

**Answers**

1. **0.01333**

2. **0.003**

3. **714**

4. **12,500,000**

5. **0.00000005**

6. **571**

7. **3,330**

8. **0.3**

9. **11.67**



Solve each problem. Answer as a decimal (if necessary).

Answers

1)  $5 \times 10^4$  is \_\_\_\_\_  $\times$  the value of  $8 \times 10^3$

1. \_\_\_\_\_

2)  $4 \times 10^2$  is \_\_\_\_\_  $\times$  the value of  $5 \times 10^4$

2. \_\_\_\_\_

3)  $2 \times 10^8$  is \_\_\_\_\_  $\times$  the value of  $3 \times 10^6$

3. \_\_\_\_\_

4)  $4 \times 10^4$  is \_\_\_\_\_  $\times$  the value of  $7 \times 10^9$

4. \_\_\_\_\_

5)  $9 \times 10^4$  is \_\_\_\_\_  $\times$  the value of  $6 \times 10^6$

5. \_\_\_\_\_

6)  $9 \times 10^6$  is \_\_\_\_\_  $\times$  the value of  $5 \times 10^2$

6. \_\_\_\_\_

7)  $6 \times 10^4$  is \_\_\_\_\_  $\times$  the value of  $3 \times 10^6$

7. \_\_\_\_\_

8)  $2 \times 10^3$  is \_\_\_\_\_  $\times$  the value of  $5 \times 10^9$

8. \_\_\_\_\_

9)  $9 \times 10^8$  is \_\_\_\_\_  $\times$  the value of  $8 \times 10^4$

9. \_\_\_\_\_



Solve each problem. Answer as a decimal (if necessary).

1)  $5 \times 10^4$  is \_\_\_\_\_  $\times$  the value of  $8 \times 10^3$   

$$\frac{5 \times 10^4}{8 \times 10^3} = \frac{5}{8} \times \frac{10^4}{10^3} = \frac{5}{8} \times 10^1 = 0.625 \times 10^1$$

2)  $4 \times 10^2$  is \_\_\_\_\_  $\times$  the value of  $5 \times 10^4$   

$$\frac{4 \times 10^2}{5 \times 10^4} = \frac{4}{5} \times \frac{10^2}{10^4} = \frac{4}{5} \times 10^{-2} = 0.8 \times 10^{-2}$$

3)  $2 \times 10^8$  is \_\_\_\_\_  $\times$  the value of  $3 \times 10^6$   

$$\frac{2 \times 10^8}{3 \times 10^6} = \frac{2}{3} \times \frac{10^8}{10^6} = \frac{2}{3} \times 10^2 = 0.667 \times 10^2$$

4)  $4 \times 10^4$  is \_\_\_\_\_  $\times$  the value of  $7 \times 10^9$   

$$\frac{4 \times 10^4}{7 \times 10^9} = \frac{4}{7} \times \frac{10^4}{10^9} = \frac{4}{7} \times 10^{-5} = 0.571 \times 10^{-5}$$

5)  $9 \times 10^4$  is \_\_\_\_\_  $\times$  the value of  $6 \times 10^6$   

$$\frac{9 \times 10^4}{6 \times 10^6} = \frac{9}{6} \times \frac{10^4}{10^6} = \frac{3}{2} \times 10^{-2} = 1.5 \times 10^{-2}$$

6)  $9 \times 10^6$  is \_\_\_\_\_  $\times$  the value of  $5 \times 10^2$   

$$\frac{9 \times 10^6}{5 \times 10^2} = \frac{9}{5} \times \frac{10^6}{10^2} = \frac{9}{5} \times 10^4 = 1.8 \times 10^4$$

7)  $6 \times 10^4$  is \_\_\_\_\_  $\times$  the value of  $3 \times 10^6$   

$$\frac{6 \times 10^4}{3 \times 10^6} = \frac{6}{3} \times \frac{10^4}{10^6} = \frac{2}{1} \times 10^{-2} = 2 \times 10^{-2}$$

8)  $2 \times 10^3$  is \_\_\_\_\_  $\times$  the value of  $5 \times 10^9$   

$$\frac{2 \times 10^3}{5 \times 10^9} = \frac{2}{5} \times \frac{10^3}{10^9} = \frac{2}{5} \times 10^{-6} = 0.4 \times 10^{-6}$$

9)  $9 \times 10^8$  is \_\_\_\_\_  $\times$  the value of  $8 \times 10^4$   

$$\frac{9 \times 10^8}{8 \times 10^4} = \frac{9}{8} \times \frac{10^8}{10^4} = \frac{9}{8} \times 10^4 = 1.125 \times 10^4$$

Answers

1. **6.25**

2. **0.008**

3. **66.7**

4. **0.00000571**

5. **0.015**

6. **18,000**

7. **0.02**

8. **0.0000004**

9. **11,250**





Solve each problem. Answer as a decimal (if necessary).

Answers

1)  $7 \times 10^5$  is \_\_\_\_\_  $\times$  the value of  $3 \times 10^6$

1. \_\_\_\_\_

2)  $6 \times 10^2$  is \_\_\_\_\_  $\times$  the value of  $7 \times 10^3$

2. \_\_\_\_\_

3)  $4 \times 10^6$  is \_\_\_\_\_  $\times$  the value of  $3 \times 10^2$

3. \_\_\_\_\_

4)  $9 \times 10^5$  is \_\_\_\_\_  $\times$  the value of  $4 \times 10^9$

4. \_\_\_\_\_

5)  $6 \times 10^7$  is \_\_\_\_\_  $\times$  the value of  $9 \times 10^6$

5. \_\_\_\_\_

6)  $3 \times 10^3$  is \_\_\_\_\_  $\times$  the value of  $6 \times 10^5$

6. \_\_\_\_\_

7)  $5 \times 10^9$  is \_\_\_\_\_  $\times$  the value of  $8 \times 10^6$

7. \_\_\_\_\_

8)  $7 \times 10^8$  is \_\_\_\_\_  $\times$  the value of  $2 \times 10^4$

8. \_\_\_\_\_

9)  $5 \times 10^7$  is \_\_\_\_\_  $\times$  the value of  $3 \times 10^8$

9. \_\_\_\_\_



Solve each problem. Answer as a decimal (if necessary).

1)  $7 \times 10^5$  is \_\_\_\_\_  $\times$  the value of  $3 \times 10^6$   

$$\frac{7 \times 10^5}{3 \times 10^6} = \frac{7}{3} \times \frac{10^5}{10^6} = \frac{7}{3} \times 10^{-1} = 2.333 \times 10^{-1}$$

2)  $6 \times 10^2$  is \_\_\_\_\_  $\times$  the value of  $7 \times 10^3$   

$$\frac{6 \times 10^2}{7 \times 10^3} = \frac{6}{7} \times \frac{10^2}{10^3} = \frac{6}{7} \times 10^{-1} = 0.857 \times 10^{-1}$$

3)  $4 \times 10^6$  is \_\_\_\_\_  $\times$  the value of  $3 \times 10^2$   

$$\frac{4 \times 10^6}{3 \times 10^2} = \frac{4}{3} \times \frac{10^6}{10^2} = \frac{4}{3} \times 10^4 = 1.333 \times 10^4$$

4)  $9 \times 10^5$  is \_\_\_\_\_  $\times$  the value of  $4 \times 10^9$   

$$\frac{9 \times 10^5}{4 \times 10^9} = \frac{9}{4} \times \frac{10^5}{10^9} = \frac{9}{4} \times 10^{-4} = 2.25 \times 10^{-4}$$

5)  $6 \times 10^7$  is \_\_\_\_\_  $\times$  the value of  $9 \times 10^6$   

$$\frac{6 \times 10^7}{9 \times 10^6} = \frac{6}{9} \times \frac{10^7}{10^6} = \frac{2}{3} \times 10^1 = 0.667 \times 10^1$$

6)  $3 \times 10^3$  is \_\_\_\_\_  $\times$  the value of  $6 \times 10^5$   

$$\frac{3 \times 10^3}{6 \times 10^5} = \frac{3}{6} \times \frac{10^3}{10^5} = \frac{1}{2} \times 10^{-2} = 0.5 \times 10^{-2}$$

7)  $5 \times 10^9$  is \_\_\_\_\_  $\times$  the value of  $8 \times 10^6$   

$$\frac{5 \times 10^9}{8 \times 10^6} = \frac{5}{8} \times \frac{10^9}{10^6} = \frac{5}{8} \times 10^3 = 0.625 \times 10^3$$

8)  $7 \times 10^8$  is \_\_\_\_\_  $\times$  the value of  $2 \times 10^4$   

$$\frac{7 \times 10^8}{2 \times 10^4} = \frac{7}{2} \times \frac{10^8}{10^4} = \frac{7}{2} \times 10^4 = 3.5 \times 10^4$$

9)  $5 \times 10^7$  is \_\_\_\_\_  $\times$  the value of  $3 \times 10^8$   

$$\frac{5 \times 10^7}{3 \times 10^8} = \frac{5}{3} \times \frac{10^7}{10^8} = \frac{5}{3} \times 10^{-1} = 1.667 \times 10^{-1}$$

Answers

1. **0.2333**

2. **0.0857**

3. **13,330**

4. **0.000225**

5. **6.67**

6. **0.005**

7. **625**

8. **35,000**

9. **0.1667**



Solve each problem. Answer as a decimal (if necessary).

1)  $6 \times 10^6$  is \_\_\_\_\_  $\times$  the value of  $5 \times 10^9$

2)  $7 \times 10^5$  is \_\_\_\_\_  $\times$  the value of  $9 \times 10^9$

3)  $4 \times 10^3$  is \_\_\_\_\_  $\times$  the value of  $9 \times 10^6$

4)  $8 \times 10^8$  is \_\_\_\_\_  $\times$  the value of  $7 \times 10^3$

5)  $4 \times 10^9$  is \_\_\_\_\_  $\times$  the value of  $7 \times 10^8$

6)  $6 \times 10^2$  is \_\_\_\_\_  $\times$  the value of  $7 \times 10^4$

7)  $5 \times 10^8$  is \_\_\_\_\_  $\times$  the value of  $7 \times 10^9$

8)  $9 \times 10^6$  is \_\_\_\_\_  $\times$  the value of  $2 \times 10^4$

9)  $8 \times 10^8$  is \_\_\_\_\_  $\times$  the value of  $4 \times 10^5$

**Answers**

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

5. \_\_\_\_\_

6. \_\_\_\_\_

7. \_\_\_\_\_

8. \_\_\_\_\_

9. \_\_\_\_\_



Solve each problem. Answer as a decimal (if necessary).

1)  $6 \times 10^6$  is \_\_\_\_\_  $\times$  the value of  $5 \times 10^9$

$$\frac{6 \times 10^6}{5 \times 10^9} = \frac{6}{5} \times \frac{10^6}{10^9} = \frac{6}{5} \times 10^{-3} = 1.2 \times 10^{-3}$$

2)  $7 \times 10^5$  is \_\_\_\_\_  $\times$  the value of  $9 \times 10^9$

$$\frac{7 \times 10^5}{9 \times 10^9} = \frac{7}{9} \times \frac{10^5}{10^9} = \frac{7}{9} \times 10^{-4} = 0.778 \times 10^{-4}$$

3)  $4 \times 10^3$  is \_\_\_\_\_  $\times$  the value of  $9 \times 10^6$

$$\frac{4 \times 10^3}{9 \times 10^6} = \frac{4}{9} \times \frac{10^3}{10^6} = \frac{4}{9} \times 10^{-3} = 0.444 \times 10^{-3}$$

4)  $8 \times 10^8$  is \_\_\_\_\_  $\times$  the value of  $7 \times 10^3$

$$\frac{8 \times 10^8}{7 \times 10^3} = \frac{8}{7} \times \frac{10^8}{10^3} = \frac{8}{7} \times 10^5 = 1.143 \times 10^5$$

5)  $4 \times 10^9$  is \_\_\_\_\_  $\times$  the value of  $7 \times 10^8$

$$\frac{4 \times 10^9}{7 \times 10^8} = \frac{4}{7} \times \frac{10^9}{10^8} = \frac{4}{7} \times 10^1 = 0.571 \times 10^1$$

6)  $6 \times 10^2$  is \_\_\_\_\_  $\times$  the value of  $7 \times 10^4$

$$\frac{6 \times 10^2}{7 \times 10^4} = \frac{6}{7} \times \frac{10^2}{10^4} = \frac{6}{7} \times 10^{-2} = 0.857 \times 10^{-2}$$

7)  $5 \times 10^8$  is \_\_\_\_\_  $\times$  the value of  $7 \times 10^9$

$$\frac{5 \times 10^8}{7 \times 10^9} = \frac{5}{7} \times \frac{10^8}{10^9} = \frac{5}{7} \times 10^{-1} = 0.714 \times 10^{-1}$$

8)  $9 \times 10^6$  is \_\_\_\_\_  $\times$  the value of  $2 \times 10^4$

$$\frac{9 \times 10^6}{2 \times 10^4} = \frac{9}{2} \times \frac{10^6}{10^4} = \frac{9}{2} \times 10^2 = 4.5 \times 10^2$$

9)  $8 \times 10^8$  is \_\_\_\_\_  $\times$  the value of  $4 \times 10^5$

$$\frac{8 \times 10^8}{4 \times 10^5} = \frac{8}{4} \times \frac{10^8}{10^5} = \frac{2}{1} \times 10^3 = 2 \times 10^3$$

Answers

1. **0.0012**

2. **0.0000778**

3. **0.000444**

4. **114,300**

5. **5.71**

6. **0.00857**

7. **0.0714**

8. **450**

9. **2,000**